LOS ANGELES FIRE DEPARTMENT

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FIRE CHIEF

October 21, 2019

BOARD OF FIRE COMMISSIONERS
FILE NO.   19-139

TO: Board of Fire Commissioners

FROM: Ralph M. Terrazas, Fire Chief

SUBJECT: LOS ANGELES FIRE DEPARTMENT (LAFD) RECRUIT TRAINING
ACADEMY OVERVIEW

FINAL ACTION:	_____ Approved	_____ Approved w/Corrections	_____ Withdrawn
	_____ Denied	_____ Received & Filed	_____ Other

SUMMARY

As directed by Commission President Delia Ibarra on September 5, 2017, the Fire
Department is providing an update relative to the diversity and retention rates within the
Recruit Training Academy (Academy). The report reflects data from the time Recruit
Firefighters enter the Academy through the end of probation.

Utilizing the data parameters and timelines as requested by the Commission, the Fire
Department organized, assessed, and analyzed the information along with the
outcomes.

RECOMMENDATION

That the Board:
Receive and file this report.

DISCUSSION

In accordance with the Commission's request and the 2018 LAFD Recruit Training
Academy Overview Report (2018 Academy Report), ethnic/gender composition and
retention rates from the start of the Academy through the end of probation were
measured and analyzed.

The data timelines are being presented in three specific areas as requested and are
defined to ensure consistency and uniform application throughout the report.
Additionally, the data fields are being presented for future Academy Classes to ensure
the expectation is clear relative to data maturation timelines for future reports.

The data parameters include the following:

- **New Hires** – The number of brand new Recruit Firefighters (Recruits) for an Academy.

- **Graduates** – Refers to Recruits who successfully completed the Academy curriculum.

- **Completed Probation** – Refers to Probationary Firefighters (PFF) who have successfully completed 365 days of their probationary field internship.

The timeline to obtain a full data set from one Academy Class, which includes all three of the aforementioned categories as requested by the Commission, is approximately one year and five months for the data to mature.

The duration of the Academy is 22 weeks, which is referred to as five months in this report. The subsequent field probationary period remains at one full year or 365 days. The following chart demonstrates the timeline as it relates to the defined terminology and the stages of a newly hired Firefighter.
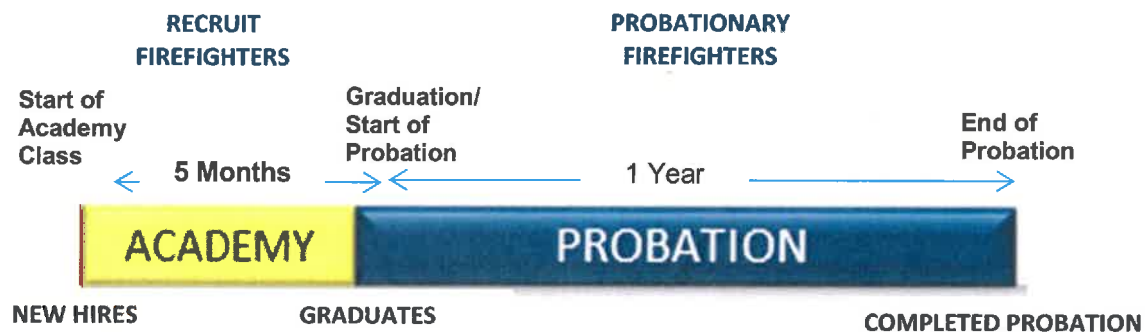
This report has been divided into four sections. Three segments provide context and a baseline for the success of the current process and are defined as follows:

- **End Status of Academy Classes (End Status)** – Includes all data fields; New Hires, Graduates, and Completed Probation.

- **Ongoing Recruit Status of Academy Classes on Probation (Ongoing Status)** - Includes two data fields; New Hires and Graduates. These Classes have not Completed Probation.

- **Current Recruit Academy Class Status (Current Class Status)** - Includes one data field. The New Hires are currently assigned to the Academy.

The fourth portion of the report provides an **Overall Analysis** of the new information including an appraisal and examination of the 2019/2020 Action Plan Goals from the 2018 Academy Report.

1. END STATUS OF ACADEMY CLASSES

This section assesses Academy Class statistics which contains mature data from the time the Recruits entered the Academy through the end of probation. The corresponding Start, Graduation, and Probationary End dates for each Academy Class are included below. Three additional Academy Classes (highlighted light blue below) have completed the probationary period since the 2018 Academy Report.

	Academy Class	Academy Start Date	Graduation Date	Probation End Date	Fiscal Year
1	2014-1	12/29/2014	05/14/2015	05/16/2016	FY 14/15
2	2014-2	04/06/2015	08/20/2015	08/22/2016	FY 14/15
3	2015-1	07/13/2015	11/24/2015	11/28/2016	FY 15/16
4	2015-2	09/21/2015	02/04/2016	02/06/2017	FY 15/16
5	2015-3	12/14/2015	04/28/2016	05/01/2017	FY 15/16
6	2015-4A	02/08/2016	06/09/2016	06/12/2017	FY 15/16
7	2015-5	05/16/2016	09/28/2016	10/02/2017	FY 15/16
8	2015-6	06/27/2016	11/09/2016	11/13/2017	FY 15/16
9	2016-1	10/17/2016	03/02/2017	03/05/2018	FY 16/17
10	2016-2	11/28/2016	04/13/2017	04/16/2018	FY 16/17
11	2016-3	03/20/2017	08/03/2017	08/06/2018	FY 16/17
12	2016-4	05/01/2017	09/14/2017	09/17/2018	FY 16/17
13	2017-1	08/21/2017	01/04/2018	01/06/2019	FY 17/18
14	2017-2S (Safer)	01/22/2018	06/07/2018	06/09/2019	FY 17/18
15	2017-3	02/15/2018	07/19/2018	07/21/2019	FY 17/18

The following tables and charts list the number of New Hires, Graduates, and Probationary members that Completed Probation, and corresponding retention rates for each stage assessed by gender, ethnicity, and as a whole.

End Status Recruit Classes 2018					
Academy Class	New Hires	Academy Retention	Graduates	Probationary Retention	Completed Probation
2015-5	60	82%	49	94%	46
2015-6	47	89%	42	98%	41
2016-1	65	69%	45	98%	44
2016-2	49	94%	46	98%	45
2016-3	63	86%	54	98%	53
2016-4	53	85%	45	93%	42
Total	337	83% *	281	96% **	271
*Average Attrition in the Academy – 17% **Average Attrition during Probation – 4%					

End Status Recruit Classes 2019					
Academy Class	New Hires	Academy Retention	Graduates	Probationary Retention	Completed Probation
2017-1	59	88%	52	96%	50
2017-2S	48	98%	47	100%	47
2017-3	66	73%	48	94%	45
Total	173	85%	147	97%	142

*Average Attrition in the Academy – 15%   **Average Attrition during Probation – 3%

Aggregate End Status Recruit Classes 2018/2019					
Aggregate Totals	510	85%	428	97%	413

1.1 Gender – End Status of Academy Classes

Aggregate 15 Classes from 2014-1 to 2017-3

Gender	New Hires	Academy Retention	Graduates	Probationary Retention	Completed Probation
Female	61	59%	36	100%	36
Male	772	85%	654	97%	636
Total	833	83%	690	97%	672

1.2 Ethnicity – End Status of Academy Classes

Aggregate Ethnic Representation of 15 Classes from 2014-1 to 2017-3

Ethnicity	New Hires	Academy Retention	Graduates	Probationary Retention	Completed Probation
African American	93	78%	73	100%	73
Asian	56	75%	42	98%	42
Caucasian	395	85%	335	98%	328
Filipino	19	63%	12	100%	12
Hispanic	264	85%	224	95%	213
Native American	6	67%	4	100%	4
Total	833	83%	690	97%	672

End Status Academy Classes 2019, 3 Classes from 2017-1 to 2017-3

Ethnicity	New Hires	Academy Retention	Graduates	Probationary Retention	Completed Probation
African American	29	72%	20	100%	20
Asian	10	100%	12*	100%	12
Caucasian	75	85%	65	95%	62
Filipino	4	75%	3	100%	3
Hispanic	53	89%	46	96%	44
Native American	2	100%	1	100%	1
Total	173	85%	147	97%	142

*Due to Re-Assignment from previous classes

Analysis – End Status of Academy Classes

The End Status Report includes all data fields as requested by the Commission which allow for the tracking of Recruits from entry into the Academy through the end of probation.

The aggregate retention rate for women that graduated from the Training Academy is 59%. Additionally, the Academy retention rate from the last reporting period to current has improved from 83% to 85%. This is attributed to the front-end recruitment phase, educational process during the candidate selection, and ensuring the fitness requirements to be successful in the Academy are well known by candidates.

In analyzing ethnic representation, the general consistency from the point of entry into the training process through the end of probation reflects well on new hire diversity. The charts also reflect that the distribution of ethnicity through the end of probation improves for some groups. African American representation at End State was previously 10% for Classes 2014-1 to 2016-4. This percentage increased to 14% for Classes 2017-1 to 2017-3. The two smallest populations are Native American and Asian/Filipino collectively. It should be noted that Asians/Filipinos, African Americans and Native Americans all have a 100% probationary retention rate for this reporting period.

Of the Aggregate 690 Graduates who advanced to probation, 19 PFF's (2.8%) did not complete the probationary period for all 15 Classes. The reasons a PFF does not complete probation vary and are listed in this section. The probationary retention rate is 97% for the current reporting period and the aggregate retention rate is also 97%. This measure is considered to be favorable and is a clear indication that the Academy continues to execute the Recruit training mission at a very high level of proficiency.

As can be ascertained by the table below, 8 PFF's did not complete probation. Three separations were due to misconduct and the others due to outlier personal issues. It should be noted that only one probationary separation was due to performance issues

which is a well-defined and distinct measurement that when Recruits graduate from the Academy, they are well prepared and ready for the rigors and demands of the Firefighter position in the field.

	Probationary Firefighters	Recruit Class	Resign/ Terminated	Reason
1	Male Caucasian	2017-1	Resigned	In lieu of (Misconduct)
2	Male Caucasian	2017-1	Resigned	Personal Reasons
3	Male Hispanic	2017-3	Resigned	Performance
4	Male Hispanic	2017-3	Resigned	In lieu of (misconduct)
5	Male Caucasian	2017-3	Resigned	Committed Suicide
6	Male Hispanic	2018-1	Resigned	In lieu of (Misconduct)
7	Female Caucasian	2018-2	Resigned	Personal Reasons (To be a pilot in Australia)
8	Male Hispanic	2018-2	Resigned	Returned to Dallas FD

End Status – Probationary Separations Recruit Classes 2018

2. ONGOING STATUS OF ACADEMY CLASSES ON PROBATION

This section discusses Academy Classes for which two of the three data fields, New Hires and Graduates, are available. There are currently two Classes which have graduated and are still progressing through the probationary period. The full data set for these Academy Classes will not be available until each class reaches the Probation End Dates identified below:

| No. of Classes	Academy Class	Academy Start Date	Graduation Date	Probation End Date	Fiscal Year
1	2018-1	07/23/18	12/20/18	12/22/19	FY18/19
2	2018-2	01/07/19	06/06/19	06/08/20	FY18/19

The following tables and charts provide the number of Hires, Graduates, and corresponding retention rates for each of the Academy Classes evaluated by gender and ethnicity at graduation. Gender and Ethnicity retention rates are also included for the same two data fields which provide a refined pathway to analysis and comparison.

Academy Class	New Hires	Academy Retention	Graduates
2018-1	62	82%	51
2018-2	62	92%	57
Total	124	87% **	108
**Average attrition in the Academy – 13%			

2.1 Gender – Ongoing Academy Status
Graduated Classes: 2018-1 to 2018-2

Gender	New Hires	Academy Retention	Graduates
Female	18	67%	12
Male	106	91%	96
Total	124	87%	108

Class 2018-1 to 2018-2 New Hires

Female = 18
Male = 106
Total = 124

Class 2018-1 to 2018-2 Graduates

Female = 12
Male = 96
Total = 108
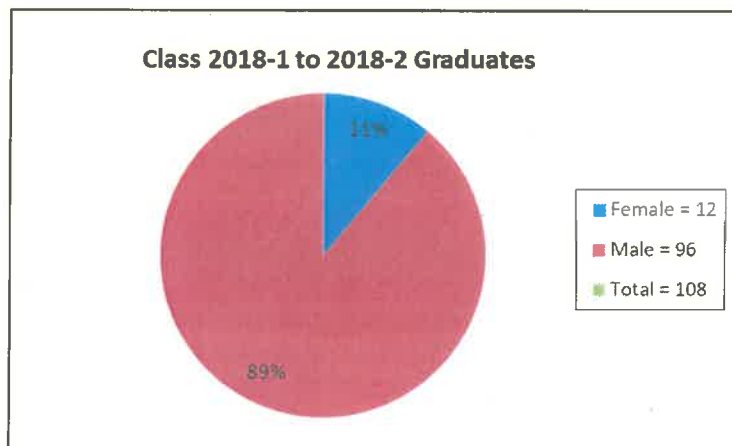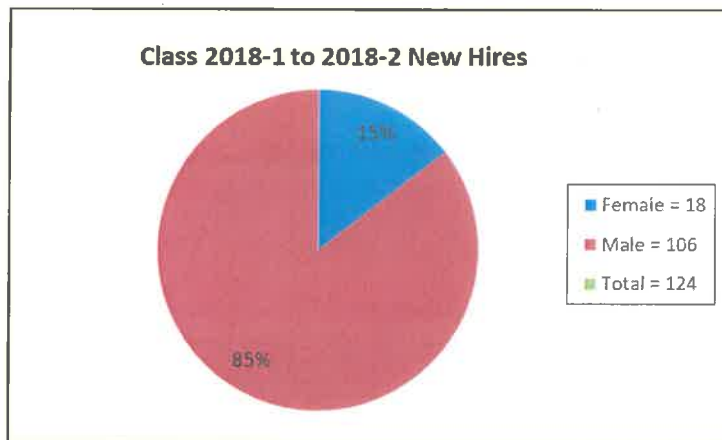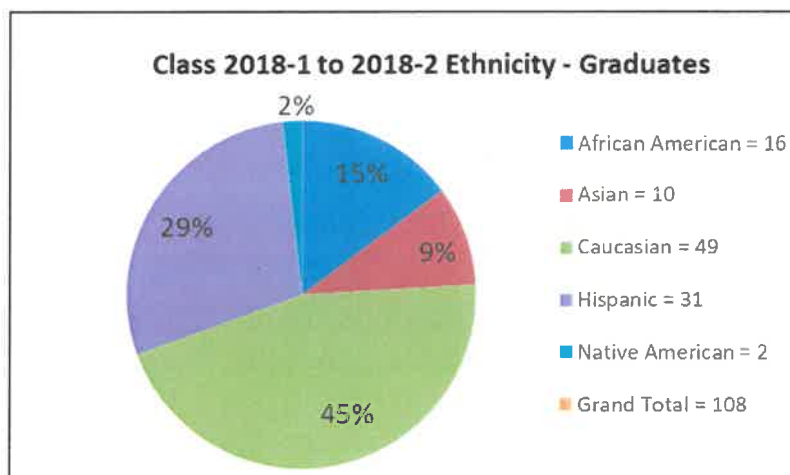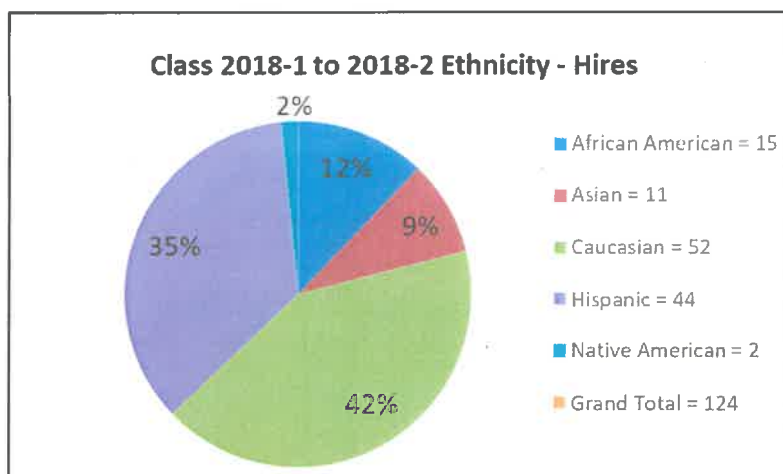
2.2 Ethnicity – Ongoing Academy Status
Graduated Classes: 2018-1 to 2018-2

Ethnicity	New Hires	Academy Retention	Graduates
African American	15	100%	16*
Asian	11	91%	10
Caucasian	52	94%	49
Hispanic	44	75%	31
Native American	2	100%	2
Total	124	87%	108

*Due to Re-assignment from previous classes

Class 2018-1 to 2018-2 Ethnicity - Hires

2%
12%
9%
35%
42%

- African American = 15
- Asian = 11
- Caucasian = 52
- Hispanic = 44
- Native American = 2
- Grand Total = 124

Class 2018-1 to 2018-2 Ethnicity - Graduates

2%
15%
9%
29%
45%

- African American = 16
- Asian = 10
- Caucasian = 49
- Hispanic = 31
- Native American = 2
- Grand Total = 108

2.3 Analysis – Ongoing Status

The Ongoing Status section focuses on two of the three data fields; New Hires and Graduates. The remaining two Classes, 2018-1 and 2018-2, are set to complete probation within the next 9 months. A total of 108 Recruits graduated from these Classes and moved on to the field internship. The following information reflects an assessment of the statistics/data outcomes for the Recruit Classes identified in this section of the report:

- Female representation equaled 11% of total Graduates, an increase of 4% from the previous reporting period of 7%.

- Female representation totaled 15% of New Hires which is a 6% increase since the 2018 Academy Report at 9%.

- Out of the 16 female Recruits who did not graduate, a total of six are still eligible for graduation due to the success of the re-assignment process.

- Similar to the data analyzed in the End Status Reporting section, the ethnic composition of Hires and Graduates remains relatively consistent through graduation which reflects well on diversity in the Academy and is an expected bi-product of the Department's robust recruitment and hiring efforts.

3. CURRENT ACADEMY CLASSES

There is currently one Academy Class in session, Class 2018-3. The data for this Class is scheduled to fully mature in November 2020. Graduation is scheduled for November 21, 2019 and retention statistics will be reported in the 2020 Academy Overview Report.

Academy Class	Academy Start Date	Graduation Date	Probation End Date	Fiscal Year
2018-3	6/24/2019	11/21/2019	11/23/2020	FY 18/19

3.1 Gender – Current Status

Gender	New Hires
Female	5
Male	46
Total	51

Class 2018-3 Gender - Current Status

10%
90%
- Female
- Male
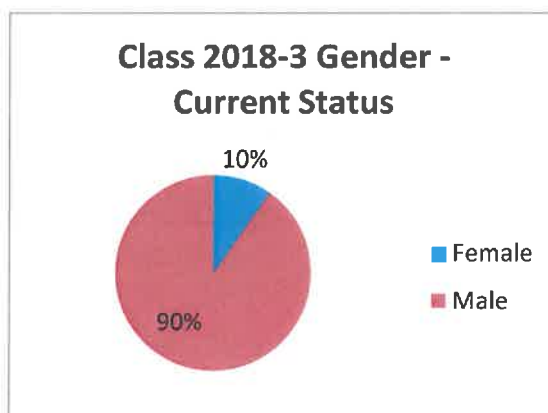
3.2 Ethnicity – Current Status

Ethnicity	New Hires
African American	12
Asian/Filipino	7
Caucasian	16
Hispanic	16
Total	51

Class 2018-3 Ethnicity Current Status

24%, 14%, 31%, 31%
- African American
- Asian/Filipino
- Caucasian
- Hispanic
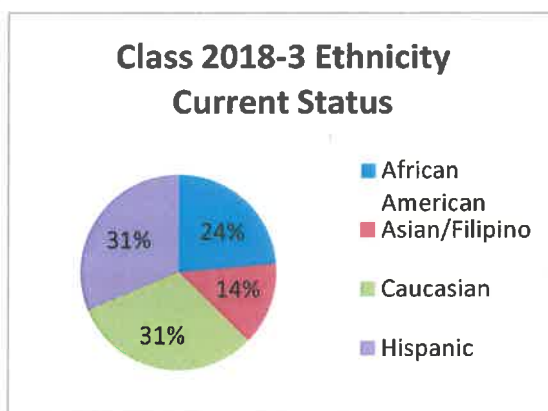
Analysis – Current Status

This section provides a snapshot of one Recruit Class currently in session. The Class is progressing well and is in alignment with the incremental improvements to ensure the outcome of a well-trained and diverse Class is achieved. According to the Board Report

(BFC 19-098) "Quarterly Fire Department Diversity Reports," dated August 6, 2019, the female population of the LAFD comprises 3.49% of uniform members. By comparison, the current Recruit Class represents 10% of New Hires which is approximately three times the current female population of the LAFD.

4. OVERALL ANALYSIS

The Academy is currently comprised of 22 weeks of academic and manipulative instruction. The training program is divided in two parts which include Basic Instruction and Advanced Practical Application Training. The Academy is an Accredited Local Academy (ALA) as established by the Office of State Fire Marshal in California. The ALA status allows the Department to certify its newest members as Firefighter I's which is in educational and training alignment with the State of California along with national organizations; International Fire Service Accreditation Congress (IFSAC) and Pro-Board Fire Service Professional Qualifications System (Pro Board).

To date, the Department has certified over 1,100 members as Firefighter I. This achievement is in alignment with the LAFD Strategic Plan, Goal 5, Strategy 4; *Align Drill Tower Academy with State Firefighter I Certification*. The acomplishment also provides a pathway to achieving Strategic Plan Benchmark Strategy 4; *Align LAFD training programs with California State Firefighter Certification tracks*, which will help provide pathways for higher education and professional development.

4.1 Gender and Ethnicity

The statistics presented at the End, Ongoing, and Current level reflect a trend in increased female representation. This indicates that targeted marketing efforts of the Recruitment campaign along with the Candidate Advancement Program (CAP), Functional Movement Screening (FMS), and Training Academy benchmarks have all had a positive impact. The increased insight and analysis into challenges within the Training Academy has resulted in more refined methods of candidate preparation and a steady progression throughout the Training Academy and the probationary period.

In reviewing and analyzing the data, it was evident that Training Academy retention rates were lower for Native Americans and Filipinos which can be attributed to a smaller sample size i.e., four Recruits enter an Academy Class and one is unsuccessful: 75% retention rate, two unsuccessful, 50% retention rate and so on. Smaller sample sizes can also have the same effect on Females as one deviation can adversely impact the retention rates of smaller groups. Conversely, Caucasians and Hispanics are among the highest in retention rates, but have the largest sample sizes wherein if one or two Recruit Firefighters in these categories are unsuccessful, the change in the retention rate is not as significant as in a smaller sample size.

During the 2017 Academy Report, women comprised 2.98% of uniform members, the 2018 Academy report indicated women as comprising 3.2% and the current female population of the Department has continued to increase to 3.49%. It can be surmised that despite continuing attrition and the closing of one Training Academy, the

Department continues to move the needle toward Strategic Plan Goal 4 (Strategy 2) of 5% women by the year 2020.

4.2 Other Essential Factors

A Firefighter candidate's interest and success in the Academy is largely dependent on human elements, personal matters, and other areas. These events which the Department can neither foresee nor influence have occurred and affect candidate preparation, training, and field internship, include the following:

- Decision to work for another agency (e.g., fire department) due to location, family proximity, etc.

- Family illness

- Personal issues

These facts are difficult to counteract or neutralize as personal inclinations and matters that are inherent to all people can have various effects on preferences and decision-making. The LAFD continues to maximize messaging to candidates and Recruit Firefighters, and constantly re-evaluate the findings to minimize the impact of such an obscure situation.

Review of Action Plan Goals

The Action Plan Goals as set forth in the 2018 Academy Report are being reviewed to evaluate progress in all of the effected areas. The LAFD continues to monitor and improve upon current goals and create new ones through the assessment of data and for the betterment of the overall Recruit Training process.

- GOAL 1: Increase female Recruit Firefighter retention at graduation by 2%.

As stated in the End Status analysis, in comparing the Academy retention rates with respect to the End Status reporting of Recruit Classes measured from the 2017 Academy Report to present, the aggregate retention rate for women that graduated from the Training Academy is 59%. The ongoing status reports a retention rate for Females at 67%. Females represented 7% of total Graduates, which remains consistent from last reporting period. Additionally, Females represented 11% of New Hires which is 2% more than the previous reporting period of 9%. There are six Females still eligible for graduation through the reassignment process which will further bolster the retention rate of women in the Training Academy.

- GOAL 2: Increase overall Recruit Firefighter retention at graduation by 2%.

In reviewing and analyzing the data specific to retention rates and comparing the Recruit Academy data from the previous reporting period to the present, it was evident that retention rates have improved overall by 2%, meeting the goal. The Recruit

Academy data from the 2018 Academy Report (End Status) indicated that the retention rate was 83% as compared to the most recent reporting period of 85%. This analysis is a positive trend in the retention of Recruit Firefighters in the Academy. It should be noted that as the retention rate is increased, the performance targets become more difficult to achieve. However, as Academy enhancements continue, the Department persists in developing new strategies, and fostering new ways to achievement.

- GOAL 3: Evaluate the CAP program attendance rate in light of the change; 15% attendance for those entering the Academy.

A review and analysis of the CAP program attendance rate indicated a small decrease since the last report. The reason for the decrease was to streamline the program to allow candidates that have passed the written exam and/or applied to the LAFD to attend. Decreasing the amount of candidates has produced a better program and focus on making the viable candidates more successful in the Academy.

This focus on the quality of the program has a unique potential to contribute in re-conceptualizing traditional male dominated fields such as becoming a Firefighter. This program is a testament to the value the LAFD has placed on physical fitness and the manipulative portions of the Academy which ultimately prepares candidates for success. The Department is currently continuing to refine this process to invite candidates to CAP who are actively engaged in the hiring process for the LAFD. In addition, more "hands-on" training was added to the Saturday CAP sessions and another CAP location has been added at Drill Tower 40 on Tuesdays to make the program more accessible.
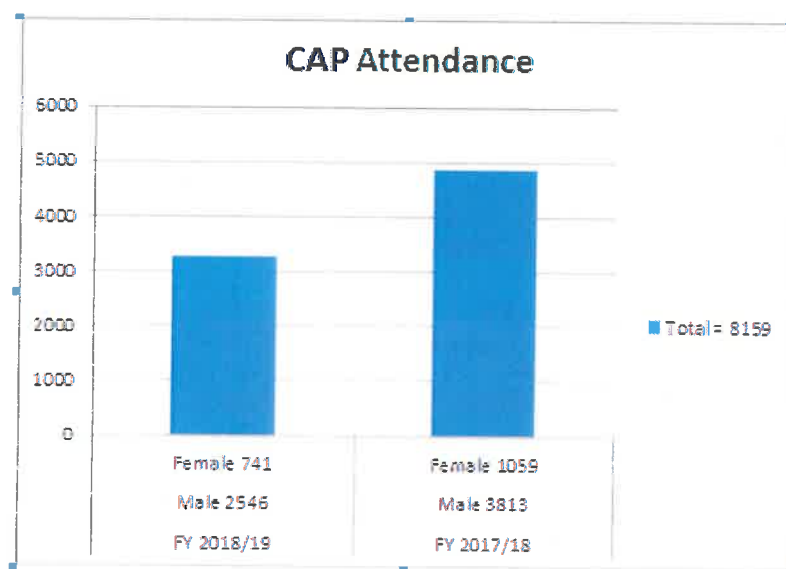
In comparing the 2018 Academy Report on injuries to the current data, injuries were reduced from 11% of the total attrition of separations to 6%. Seven separations from the Academy were due to injury related reasons (1 female or 1%, 6 male or 5%).

It is evident through the assessment of data and Academy records that the CAP program, FMS, and the comprehensive health and wellness program throughout the

Academy has been invaluable for Recruits to understand the Firefighter position, requirements, and Academy curriculum to maintain strength, stamina and reduce injuries. The Department continues to place the reduction of injuries and the minimization of occupational hazards in the Academy as one of its top priorities. During the next reporting period, the Department will continue to evaluate performance measurements. The Department's 2020-2021 annual performance targets or benchmarks associated with the Academy include the following:

- Increase Female Recruit Firefighter retention at graduation by 2%.

- Maintain current Recruit Firefighter retention at graduation.

- Evaluate the CAP program attendance rate in light of the change; 15% attendance for those entering the Academy.

The remaining Fiscal Year 2018/2019 and 2019/2020 Academy graduation dates are included in the chart below which provides a timeline and cascading target dates for analysis:

Academy Class	Academy Start Date	Graduation Date	Probation End Date	Fiscal Year
2018-3	06/24/2019	11/21/2019	11/24/2020	FY 18/19
2019-1	12/09/2019	05/07/2020	05/09/2020	FY 19/20
2019-2	05/26/2020	10/22/2020	10/24/2020	FY 19/20

The Academy dates for Fiscal Year 2020/2021 have not yet been scheduled; however, they will be identified in alignment with preparation for the development of the 2020/2021 Fire Department budget.

ENHANCEMENTS

In an effort to be proactive and increase recruit retention, the LAFD Recruit Services Section (RSS) has initiated noteworthy enhancements to the training program which include the following:

- Innovative tools have been created to aide in the recruits' success such as the "Hose Drag" tool. This prop was invented by Drill Tower Staff members to simulate and to train on advancing a flowing 1 ¾" hose line. This mandatory skill is tested in week 14 of the academy and coupled with introducing hose line advancement earlier in the academy, has significantly increased the pass rate on this evolution.

- The RSS is in the process of conducting a "lay a line" with the four-way valve pilot program that is proving successful. This success is measured by providing opportunities for success to the recruit in the overall hose lay score average. The study has revealed a more refined and increased speed of the evolution which is more realistic in relation to fire ground operations.

- In an effort to retain recruit firefighters, the RSS and the Risk Management Section have teamed up on a project to assist with the reduction of injuries. During the Academy on Wednesdays, data gained from FMS is utilized to assist with injury prevention by improving movements, correcting asymmetry, and building strength through rehabilitative exercises.

The Recruit Services Section is constantly looking at ways to make the training more efficient and preserve consistent, fair and equitable evaluation methods while maintaining training and evaluation standards.

CONCLUSION
The LAFD is recognized for innovative excellence and continues to be a world-renowned leader development institution.

It is the Department's objective to ensure that the Academy continues to evolve and adapt to changes in the generational, educational and real-world environment.

Preparation and knowledge of what it takes to be a Firefighter is key for the success of a candidate in any demographic. As such, the Department strives to provide adequate, accessible, and equitable teaching and educational curriculum such as CAP, State Firefighter I and II, and beginner FMS for Firefighter candidates.

All Department Staff of the Training and Support Bureau share a profound sense of why the team exists and are invested in accomplishing its mission and goals.

Board report prepared by Steven A. Skelly, Battalion Chief, Recruit Services Section.